

REMARKS

Claims 1-4 are all the claims pending in the application.

Applicant thanks the Examiner for accepting the drawings filed on June 7, 2001. In addition, Applicant thanks the Examiner for acknowledging that certified copies of the priority documents have been received in application No. 09/875,151, and for acknowledging Applicant's claim to foreign priority. As a final matter, Applicant thanks the Examiner for considering the references listed within the Information Disclosure Statements filed on June 7, 2001, May 7, 2003 and January 16, 2004.

The Examiner has objected to the Abstract of the Disclosure. Applicant has provided a new Abstract of the Disclosure which addresses the Examiner's objection.

Applicant has editorially amended claims 1-4 to clarify the features of the present invention. The amendments to claims 1-4 do not narrow the literal scope of the claims, were not made for reasons of patentability, and thus do not implicate an estoppel in the application of the doctrine of equivalents.

The Examiner has rejected claims 1-4 under 35 U.S.C. § 103(a). Specifically, claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanda (U.S. Patent No. 5,060,515 (in view of Hofmann WO 00/01099)).¹ Further, claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanda, in view of Hofmann, and further in view of

¹ The Examiner states that Hofmann U.S. 2001/0005176 A1 was used as an English translation.

Okawa (U.S. 2003/0031195). For the following reasons, Applicant respectfully traverses these rejections.

Claims 1-4

The Examiner has rejected independent claim 1 asserting that Kanda discloses, among other things, (1) a cross correlation coefficient calculator for calculating cross correlation coefficients between a received signal and a reference signal in a predetermined cycle, (2) a differential detector for obtaining certain “real parts” of the cross correlation coefficients, (3) an averager for averaging the cross correlation coefficients and (4) a peak detector for detecting peak values from the averaged cross correlation coefficients and outputting the same, all with respect to direct spread-code division multiple access (DS-CDMA) systems. Applicant respectfully disagrees.

Kanda specifically addresses an image signal processing circuit which employs a frame correlation circuit for performing a frame correlation process for an ultrasonic image signal and a coefficient output circuit for changing a frame correlation coefficient in accordance with a difference between an input frame image and an immediately preceding frame image. (Col. 1, lines 38-46).

It is clear that Kanda’s apparatus addresses image processing only. There is absolutely no disclosure, teaching or suggestion that Kanda’s apparatus is used, or could be used, for processing electromagnetic signals (received signals, reference signals, etc.), as recited in independent claim 1. As such, there is no support for the assertion that Kanda discloses, teaches or suggests the cross correlation coefficient calculator of claim 1.

Further, with respect to the remaining limitations contained in independent claim 1, the Examiner has cited a portion of Kanda's claim 2 for support. However, Applicant notes that this portion of Kanda's claim 2 covers at least five separate elements including, coefficient outputting means, difference output means, averaging means, detecting means and output means, all related to processing frame images and/or pixels.

Initially, none of the before-mentioned "means" directly or indirectly disclose, teach or suggest claim 1's differential detector, averager or peak detector. Further, and again as stated above, the various "means" cited by the Examiner do not address processing electromagnetic signals in any way, shape or form. Accordingly, Kanda does not disclose, teach or suggest claim 1's cross correlation coefficient calculator, differential detector, averager or peak detector.

The Hofmann reference is the only reference the Examiner cites which addresses electromagnetic signals in any manner. However, there is absolutely no suggestion in Hofmann, or for that matter in Kanda, that these two references are combinable in fact, or in theory. In fact, there is no disclosure, teaching or suggestion in either of the references, either alone or in combination, that Kanda's image processing apparatus could be combined with Hofmann's signal transmission apparatus to produce Applicant's claimed invention. Simply put, Hofmann does not supply the missing elements from Kanda, and the Examiner has not argued otherwise.

As such, Applicant respectfully submits that claim 1 remains patentable in view of the asserted combination of Kanda and Hofmann. Further, since claims 2-4 depend from claim 1, these claims are also patentable for the same reasons as stated above with respect to claim 1.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/875,151

Q64872

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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